Information Literacy: Instrument Development to Measure Competencies and Knowledge Among Nursing Educators, Nursing Administrators, and Nursing Clinicians: A Pilot Study

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ABSTRACT: This poster describes a pilot study conducted to establish validity and reliability of an instrument that will be used in a nationwide needs assessment, implemented to identify gaps in Information Literacy skills, competencies, and knowledge among key nursing groups nationally. Data and information gathered using the tool will guide the profession in developing appropriate education and continuing education programs to close identified gaps and enhance nurses' readiness for Evidence-Based Practice (EBP).

<u>PURPOSE</u>: The purpose of the study is to pilot revisions and establish validity and reliability of an instrument that will accurately identify gaps in Computer and Information Literacy (CIL) skills, competencies, and knowledge in nurses working primarily as educators, administrators or clinicians. Gaps thus identified will be filled by developing academic interventions that directly address the derived educational goals for CIL necessary to implement EBP.

BACKGROUND: During 2002, the Interagency Council of Information Resources for Nursing (ICIRN) and the Nursing Informatics Working Group of the American Medical Informatics Association (AMIA NI-WG) came together for the purpose of conducting collaborative research to identify and describe the level of application of Information Literacy skills among three RN groups: clinicians, administrators and educators. The *Scope and Standards of Nursing Informatics*¹ identify CIL as required competencies for all basic nursing graduates. Furthermore, health care providers are directed by Institute of Medicine reports ²³ to implement EBP as a means of addressing quality and cost of services delivered.

Three preliminary studies indicate gaps in the skills, competencies and knowledge of nurses related to Computer Literacy and Information Literacy, both essential for changing data and information into knowledge for clinical decision-making.

<u>SAMPLE:</u> The convenience sample utilized in this pilot study consists of three groups of interest – Nursing Administrators, Nursing Educators, and nurses in clinical practice.

<u>DESIGN</u>: The study uses a descriptive comparative design and is to be administered to subjects from different geographical locations nationwide to identify gaps in nurses' CIL skills, competencies and knowledge for evidence-based practice.

METHODOLOGY: A researcher-designed tool is administered to a convenience sample representing each of the targeted populations. Data from subject responses will be collected on a scannable form and entered into a Microsoft Excel spreadsheet. Analysis of demographic data will use parametric and non-parametric statistics. Multivariate statistics will allow comparison within and across study groups. Reliability and validity of the tool will be measured.

<u>RESULTS:</u> Results will allow an environmental assessment of gaps in computer and information literacy skills, competencies and knowledge. The conclusions will guide professional development and academic integration of programs and processes to close the identified gaps.

References

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